

Native Prairie

UPDATE

VOLUME 12 - FALL 2001

Hello prairie stewards! With autumn officially upon us, it's time again for an update on stewardship program activities and share stories about the work of some of your fellow stewards.

We have been busy cooperating with several other organizations to deliver native prairie conservation programs. We worked with Saskatchewan Environment and Resource Management to visit landowners of native prairie where rare plants had been seen at some time in the last eighty years. Eighteen new stewards joined the program to voluntarily conserve over 11,000 acres of prairie through this initiative (see the article on rare plant conservation in this issue).

We partnered with the Saskatchewan Burrowing Owl Interpretive Centre and Nature Saskatchewan's Operation Burrowing Owl Program to hire a staff person for the summer. Brent Mason made presentations on native prairie and burrowing owls at several parks, and visited over 100 members of the Operation Burrowing Owl Program to discuss native prairie management and stewardship.

We are also working with the Nature Conservancy to offer the option of conservation easements to our stewards. Please be sure to read the short article in this issue on conservation easements. It may be of interest to many of you that the Nature Conservancy, as well as several other agencies, are now willing to purchase easement agreements, in addition to accepting donated agreements. Conservation easements offer landowners another tool for conserving habitat.

In addition, we are presently developing an internet prairie management workshop that you can take from the comfort of your own homes. Please see the insert and consider participating in this exciting opportunity to develop your own management plan and learn more about internet technology.

And please stop by to see us at our booth at Saskatoon's Fall Fair (November 14-17) and Regina's Canadian Western Agribition (November 18-25). We'd love to talk to you in person!

*Lesley Hall, Manager
Native Prairie Stewardship Program*



Murray and Selena McGillivray

Carrying capacity and water access improved on Radville district ranch

By Stan Bartlett

Even after 32 years, Murray and Selena McGillivray of the Radville district are anxious to try new techniques to improve the management of their 400-head cattle operation and native prairie grassland.

With the assistance of the Saskatchewan Wetland Conservation Corporation (SWCC) and its funding partner, the Prairie Conservation Action Plan, the couple has taken steps to improve the carrying capacity and help drought proof their 5,400-acre ranch. The project involves erecting cross fencing to help with distribution problems as well as the development of a solar water pumping station to improve the riparian areas.

Last year 136 new agreements involving 50,000 acres of native prairie were signed between SWCC and producers. It brought the total amount of conserved prairie in Saskatchewan under the Native Prairie Stewardship Program up to 200,000 acres.

"One of the other objectives of the project was to lower costs," said Murray. "If we can lengthen the grazing season later in the fall and earlier in the spring without doing damage to the grass, we can lower our unit costs. There's only going to be so much money in these cattle and the only variable we can improve is keeping our costs down. The cheapest thing

always is to graze and our biggest, single cost is winter feed."

"And by not concentrating our cattle in pens in the yard, it has really cut our manure costs by letting them graze out later," adds Selena.

They use a rotational grazing system to move the 400 head of cattle over six separate areas and allow some areas to be rested. For winter feed they grow 400 acres of oats and other feed, but mostly depend on a healthy native prairie to sustain their Black Angus bred-to-Gelbvieh herd.

"We found by doing more cross fencing it greatly enhances our carrying capacity and the health of the grass and species," said Murray.

"There are over 100 different grasses with multipliers and invaders. Generally, the good grasses aren't as prolific as the invaders or the poorer grasses. If you don't handle your pastures right, you lose your good wheat grasses and sedges and end up with those that aren't as palatable or nutritious. It's thrown out of natural balance."

The project focused on two areas of the ranch and was largely completed last summer.

Nearly three kilometers of fence was erected to enclose a quarter section for grazing. In one corner of the field a small dugout was added and it also was fenced to limit the cattle's access to one end and prevent excessive tramping.

"That way they can't tramp it and damage the riparian area around the dugout. It's got three truckloads of stones and gravel to give it a good firm base even into the water," said Murray.

A second project has been started on their nearby "summer field" of mixed grass prairie, an area of 14 quarter sections with five dugouts and no natural water source. There are three paddocks but a distribution problem and lack of water.

The Prairie Farm Assistance Administration (PFRA) are assisting with a large dugout - in excess of 5,000 yards in size - to try and

drought proof the field, said McGillivray.

Neal Wilson, an agricultural biologist with SWCC who co-ordinated the project, said another feature of the project is an inexpensive trough placed in the middle of the field.

"The selling feature of the trough is that it's low cost. It's made with a rubber tarp over a wooden frame and set low enough so the calves can get at it. It will provide about 5,000 gallons of water pumped from the dugout.

"The 16 by 32 foot trough will provide a three-day supply of high quality water at about 25 cents a gallon whereas most troughs are a dollar a gallon," said Wilson. The large amount of good quality water should help the financial bottom line, said Wilson.

Since the cattle avoided the hills and overgrazed the flat areas causing distribution problems the south side of the pasture was getting overgrazed. Also in the rough areas the cattle moved off on pockets and during breeding season were missed by the bull.

This spring another three kilometres of cross fencing will be erected across two areas to complete the project in the summer field.

"Once we get the dugout in, we'll fence them right out of there totally. We've got a solar pump system and we'll be changing our water system," he said.

Integrated range management and rotational grazing is really just common sense, said Murray. "We wanted to help our carrying capacity and make sure we didn't damage our pasture," said Murray.

Their native pasture grasses includes needle and thread grass, western wheat grass, blue grama grass, June grass and pasture sedge.

"We're very fussy and are trying very hard to maintain our native pasture. Because that's our crop every year and if we don't have a good crop we're not going to have the pounds of beef at the end of it. If we damage the prairie permanently we'd have to cut down our number of cows and our income would be effected adversely."

Another priority was to improve the water

quality and drought-proof the ranch, said Selena.

"There are no rivers, or streams or anything so everything is rainfall or snowfall here. We wanted to be better prepared than we were in the 1980s. It was very difficult - not just us - a lot of people weren't prepared," said Selena.

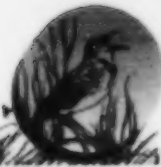
"We had no alternatives and it cost us a lot of money. We had to ship the cattle out. We did some things wrong and we learned from it."

As a result of the project, improved water quality should significantly improve production by as much as a third of a pound per day, estimates Murray. By improving the quality of the native prairie around the dugouts, additional grasses will filter the water more and improve the quality. With fences around the dugouts, it will eliminate having to repair them every 10 years or so, said Selena.

One of the other benefits of maintaining a healthy native prairie and riparian area is the favourable conditions created for wildlife, said the couple. As the remaining pieces of prairie become isolated, like islands in a sea of cultivated land and non-native vegetation, the wildlife diversity also decreases.

There's a thriving bird population on the McGillivray ranch, along with deer, prairie grouse and even one year, a moose.

"A University of Saskatchewan researcher studied the summer pasture several years ago and found an incredible variety of birds. He had never seen a native grass area with so many different species - bluebirds, cowbirds, killdeer, and shore birds along the sloughs," said Murray. The study concluded the cattle grazing didn't adversely affect the bird populations, he added. ■



The Scoop on Sage Grouse

Q. Do sage grouse stay in Saskatchewan for the winter?

Saskatchewan's population of sage grouse live year-round in their silver sagebrush habitat. Our winters are tough on the birds, but they do have some winter survival tactics. Sage grouse prefer to stay on the southwesterly side of coulees where the wind blows away snow and the afternoon sun helps to melt snow and expose sagebrush. Sage grouse will also burrow into deep snow caught around the base of sagebrush and make themselves a snow roost. Warmed by the bird's body heat, this little cave keeps the bird out of the wind and away from predators.

Q. What are leks?

Leks are the traditional strutting grounds for the sage grouse. They're usually located in flat, open areas near coulees and creek bottoms, and surrounded by sage brush flats where the females will nest after mating. If human disturbances come too close to a lek during the breeding season, sage grouse will abandon the site and may not even breed. In 1987-88, there were 44 active leks in Saskatchewan, but in 199, only 12 active leks were left.

Q. Are we doing anything to prevent humans from disturbing sage grouse during mating season?

Saskatchewan Environment and Resource Management restricts development activities within 500 metres of leks between March 15 and May 15, and within 500 nests between April 15 and June 15. For more information on development restrictions, visit the Saskatchewan Conservation Data Centre website at www.biodiversity.sk.ca

Q. Is there any place where the public can watch the sage grouse on their traditional lek?

Some lek sites are in southern Saskatchewan's Grasslands National Park



Sage Grouse

Photo courtesy of Saskatchewan Environment and Resource Management

where bird watchers are welcome to view the strutting displays. However, because of an increase in park visitors and a fear that human disturbances will upset the birds during breeding, the park has set restrictions. Bird watchers must be at least 200 meters away from leks between March 15 and May 15, and they must also be 200 meters away from the sage grouse nests between April 15 and June 15.

Q. We have sage grouse living on our land. What should we do?

First, give yourself a pat on the back for being a good steward of the native prairie. Second, check out the Saskatchewan Conservation Easement program. This program allows you to protect endangered species and habitat while retaining title to your land. For more information, visit the Saskatchewan Environment and Resource Management's website at: www.serm.gov.sk.ca/ecosystem/conservationeasements.

Provincial Act Protects Little Known Plant Species at Risk

by Myrna MacDonald

Although few Saskatchewan residents will recognize them, the Western spiderwort, hairy prairie-clover, sand verbena, tiny cryptanthus, and slender mouse-ear-cress are important names in the province's *Wildlife Act*.

When the act was amended in 1997 to include regulations that broadened its mandate to protect species at risk, these five became part of a list of 15 animal and plant species that are extirpated, endangered, threatened or vulnerable in Saskatchewan. Another listed plant species is the extirpated small white lady's-slipper which hasn't been seen in the province for 105 years.

This year, more species at risk will be added to the list — including a few of the hundreds of provincial plants that fit the criteria of endangered, threatened or vulnerable species.

"Altogether, we have between 450 and 500 taxa in our S1, S2 and S3 categories, although not all of these will make it into the legislation," explains Sheila Lamont, a botanist at the Saskatchewan Conservation Data Centre (SKCDC). The SRANKS or provincial/state ranks are based on an international ranking system for plant species. S1 may be considered to be more or less equivalent to endangered, S2 to threatened, and S3 to vulnerable.

The terms endangered, threatened and vulnerable are used in provincial and federal legislation to categorize — or indicate the status of — species at risk. Before a species can be federally recognized as endangered or threatened, a status report must be completed by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC).

"We're now trying to complete status reports on other S1 species so they can be considered for protection in the legislation as well," says Lamont.

Sand Dune Survivors

All areas of Saskatchewan have their share

of rare or sensitive plant species, but the most critical at this time are found in the province's grasslands region where more than three quarters of the native grasslands have been cultivated for agricultural use.

Like animals, plant species have adapted to change over time. "But the problem is that human activities and disturbances have sped up the process so much that we're not quite

sure if plants can adapt fast enough to survive," says Lamont. "Besides, there's apt to be total destruction of some habitats."

Of the five species currently listed in provincial legislation, the slender mouse-ear-cress and sand verbena tend to grow on eroded hillsides or on the crests of eroded riverbanks. For example, sand verbena plants have been found at mid-slope on the banks



Sand Verbena

Photo courtesy of Saskatchewan Environment and Resource Management

SAND VERBENA

Status:

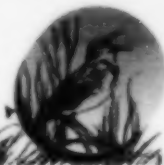
- Listed as an endangered species in Saskatchewan. COSEWIC listed the species as threatened in 1992.

Description:

- This annual plant grows to a height of 20 to 60 cm. It branches near the base and spreads along the ground except for the stem tips which turn upwards. Stems and leaf stalks are covered with sticky hairs. The distinctly veined leaves have smooth-edged, oblong blades and grow in pairs.
- Stalks with clusters of flowers grow from the points where leaves attach to the stem. The flowers have no petals, but a funnel-shaped tube encloses the stamens and ovary, and is topped by five whitish, to green or yellow, petal-like lobes.

Habitat:

- Sand Verbena grows in dry, loose sands of sand-hill areas in desert or semi-arid conditions. It's found in mixed grassland areas of southwestern Saskatchewan along the South Saskatchewan River and southeastern Alberta's Milk River area.



of the South Saskatchewan River. The hairy prairie-clover, tiny cryptanthus, and Western spiderwort grow in Saskatchewan's sand hills and dunes.

Lamont agrees that all of these plants do need more protection since they're found in small numbers in limited habitats like sand dune habitats or patches of sandy, native grassland. This doesn't mean the existing plants are unfit: "Anything that grows in a sand dune environment has to be tough. They've adapted to some very harsh conditions," points out Lamont, who spent part of the summer in 1997 conducting plant surveys in sand dune habitats in southwestern Saskatchewan.

Other plants are the biggest threat to species that grow in the sand dune habitat. After the dunes stabilize with grasses and *forbs* (herbs) adapted to dry, sandy habitats, shrubby species like buckbrush and wild roses move in, crowding out and shading smaller plants from the sun.

Before ranchers and farmers settled in Saskatchewan, grass fires lit by lightning storms naturally controlled the growth of shrubs and brush on sand dunes. But now that most grass fires are quickly suppressed by humans, the limited sand dune habitat is being stabilized by grassland vegetation and taken over by shrubs.

"What we should do is let the grasses burn once in awhile and let the system revert back to sand dunes. But grass fires are a frightening experience, and most ranchers wouldn't agree to using fire — even in a controlled setting," admits Lamont.

While some plant species require the open sand, others are adapted to persist in the more stabilized setting as well — an occurrence which Lamont and her co-worker discovered during their summer surveys. Hairy prairie-clover grows in the open, sandy dunes of the Dundurn military reserve, but it's also thriving in lower, stabilized "bowls" of the provincial sheep pasture near Mortlach where rotational grazing practices are used.

Importance of Being Diverse

While captive breeding is a common tool

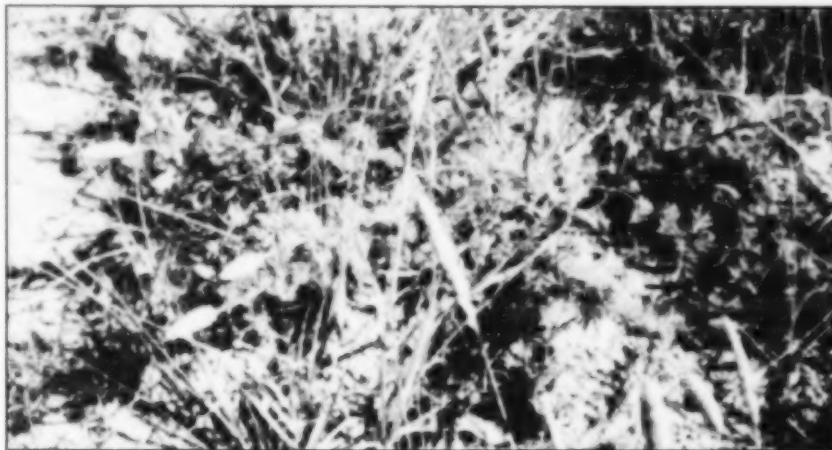
for increasing the population of wildlife species at risk, Lamont says the practice of growing endangered or threatened plant species from wild seed in greenhouses or gardens is still rare in Saskatchewan and in Canada.

But rather than focusing on preserving the actual plant species, Saskatchewan Environment and Resource Management's policy is to protect the species' entire habitat so the ecosystem's variety of plants can continue to naturally grow, propagate and adapt in the wild.

What continues to be a challenge is increasing public awareness about wild plant species at risk and convincing people of their own responsibility in protecting plants, wildlife and their habitat.

"With more genetic diversity, chances are the world will be able to survive whatever's thrown at it in terms of climate and atmospheric changes, and that's something we all have to consider," says Lamont. "If we destroy plant species because they're not directly important to us, then we may eventually turn our earth into a desert."

For more information about Saskatchewan's plant species at risk, visit the Saskatchewan Conservation Data Centre's web site at: www.biodiversity.sk.ca/, or check out www.serm.gov.sk.ca/ecosystem/speciesatrisk/ for more details about Saskatchewan's plant and wildlife species at risk.



Hairy Prairie-Clover

Photo courtesy of Saskatchewan Environment and Resource Management

HAIRY PRAIRIE-CLOVER

Status:

- The species is listed as endangered in Saskatchewan. It was listed as threatened by COSEWIC in 2000.

Description:

- A member of the pea family, this perennial plant's stems grow along the ground to lengths of 30 to 60 cm. Foliage has dense, long hairs which give the plant a velvety texture. Leaves are alternate and crowded.

Habitat:

- The species, which grows in Canada's Mixed Grasslands Region, is only found in sand hill communities where there's rapid soil drainage and sun exposure.
- In Saskatchewan, a few hundred plants grow south of Saskatoon, while less than 100 plants grow at a site near Mortlach/Caron.

Grazing pressure and mechanical means protects native prairie

By Stan Bartlett

John Vinek's pasture in the hills 40 kilometres northeast of Biggar will soon be in production after sitting idle for 20 years. Not only will the quarter section be home to 20 cow-calf pairs this spring, but also a rejuvenated patch of mixed-grass native prairie.

Vinek voluntarily joined the Native Prairie Stewardship Program operated by Saskatchewan Wetland Conservation Corporation (SWCC), with the assistance of the Prairie Conservation Action Plan, and signed one of 136 new agreements last year. The 50,000 acres of native prairie protected

last year in the province brings the total since the program began up to 200,000 conserved acres.

"Without being grazed or hayed, the brush was taking over and encroaching on the prairie and wetlands," said Vinek, a 57-year-old retired credit union manager.

"They wanted to preserve native prairie and I wanted to preserve native prairie for grazing — the two kind of go together. Now I look on it as a renewable resource. Managed properly it will be there for a long time."

After the glaciers retreated 16,000 years ago, the native prairie developed in Saskatchewan on a landscape characterized by harsh climate, fires and grazing pressure from bison — all ensuring a healthy ecosystem. Without grazing, haying or fire, the thick native prairie in the pasture on Vinek land was slowly taken over by poplar, shrubs and smooth brome grass.

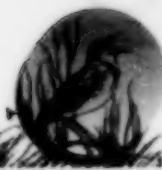
The common smooth brome grass, often planted in hay fields and ditches, is an extremely persistent and very competitive non-native species. It spreads quickly by creeping rhizomes and seeds and can be controlled by using a hand-held wick applicator to apply herbicide, controlled burning, grazing and using a rotary weed mower.

After walking the land, viewing aerial photographs and consulting SWCC staff, it was decided to try a combination of grazing pressure and mechanical means to control the brush encroachment.

"We're losing more and more grazing land each year to brush in Northern Saskatchewan," said Neil Wilson, an agrologist with SWCC who assisted with the demonstration project.



John Vinek



"Native prairie is a valuable sustainable grazing source and grazing pressure should help to restore it," said Wilson.

"It sits there in dry years. It's adapted for the conditions that we have within this province. If you look at seeded down haying fields, you're looking at monocultures. You don't have the biodiversity if a drought or flood hits, just weed problems," said Wilson.

Vinek, the former general manager of the Lloydminster Credit Union for 31 years, accumulated several parcels of land in the province over the years including the parcel near where his brother-in-law lives in the Biggar district. Since Vinek doesn't live in the area and is retired, all the work was contracted out with local firms.

"The land has sat idle for 20 years since I bought it," explains Vinek. "The previous owner grew hay and hauled it out using a team of horses. Underneath the old prairie is the old hay so it's like walking on a cushion."

Site preparation began with clearing two miles of fence line and installing three to four inch posts and five-strand wire.

A dugout had to be built since there was no water source or creek, just lots of sloughs. At 210 by 55 feet by 14-feet, the dugout was done to Prairie Farm Rehabilitation Assistance (PFRA) standards. A fence was also added around the dugout to prevent the cattle from taking an unnecessary bath.

Repeated burning, mowing and using herbicide on small areas of brush or along fence lines have all been used with success to control brush expansion. Initially, Vinek plans to clear out the buckbrush and wolf willows with a mechanical rotary mower. Depending on how effective the mowing is, Vitek said he may consider some limited burns in the sloughs.

"I wouldn't want to burn it the first year because there's so much old prairie. If the fire ever got away - there's so much dry bush and brush - it could even burn under the snow. Maybe too the cattle will tromp

the old growth into the sloughs - so I'll play it by ear."

Once the brush is controlled, there are still a couple of more things before the project is complete and the land ready for production.

Pigweed and thistle are encroaching on the sloughs so a herbicide might have to be sprayed to control that problem.

Access to the pasture is down a bumpy one-mile road overgrown with poplar and willows. Although easily negotiated by his brother-in-law's aging Silverado pick-up, the trail will take a little more grading to bring it up to standard.

Finally, he may also have to consider reseeded the brush areas along the fence areas with native prairie species if invasive weeds take hold.

This spring Vinek hopes to either graze some of his cow-calf pairs or to lease the land. Depending on rain and pasture conditions, he hopes to run 15 to 20 cow-calf pairs for 90 to 150 days on the land.

If the land is leased, there will be strict conditions to protect the native prairie, he said. There will be conditions about the maximum number of head that can be grazed, and restrictions that will kick in if there's a drought or dry spell.

"We're all set to go into production in the spring," said Vinek.

"I'll be happy to finally to get a return on my investment after paying taxes on the land for 20 years. ■

Another tool for preserving habitat!

Conservation easements offer a private sector solution to the problem of vanishing ranchlands and natural habitat. A conservation easement is a voluntary agreement between a landowner and an organization like the Nature Conservancy of Canada (NCC), which limits the amount and type of development which can occur on a property in order to conserve its natural values and agricultural potential.

The terms of conservation easements vary, as each agreement is tailored to the specific parcel of land. However, all agreements preclude environmentally damaging forms of development such as drainage of wetlands and breaking of native habitat. Conservation easement agreements with NCC are in perpetuity and remain with the land regardless of ownership.

The donation of a conservation easement may qualify the donor (landowner) for a significant income tax reduction. NCC is now providing a financial incentive to landowners in certain areas of Saskatchewan who are unable to make maximum use of a tax receipt. If a property has significant natural values and falls within one of NCC's current focus areas including the Missouri Coteau, the Qu'Appelle Valley, the Cypress Uplands, the Frenchman River watershed, the Quill Lakes, Moose Mountain and Redberry Lake, NCC may be willing to purchase a conservation easement from the landowner.

NCC will typically pay up to a maximum of 25% of the fair market value of the property for a conservation easement. The exact amount is determined after a qualified appraiser has determined the amount by which the property value is lowered due to the relinquishment of development rights.

Please contact Lesley Hall, SWCC for further information.

Coming Events

Oct 20, 2001

BIODIVERSITY WORKSHOP

U of S, Saskatoon, Sk.

This workshop will be offered by the Harmony Foundation of Canada, in partnership with Nature Saskatchewan. It is offered as part of Harmony's program- "Building Sustainable Societies-Biodiversity: Tools for Community Action".

For more Information contact Nature Sask. at (306) 780- 9273.

November 7, 2001

"CARING FOR A PRAIRIE

TREASURE" BROADCAST ON SCN
10:00 pm

The Saskatchewan Wetland Conservation Corporation and PFRA has produced a 28-minute educational video on riparian areas in Saskatchewan. This program is very timely as water problems in Saskatchewan have recently dominated the news. Six south-central Saskatchewan farmers are profiled and discuss their management techniques to conserve streambank areas on their property.

December 5 - 7, 2001

WESTERN CANADA FORAGE AND GRAZING CONFERENCE

Travelodge Hotel, Saskatoon, Sk.

Keynote speakers: Greg Simonds, Park City Utah, Ann Clark, University of Guelph, Greg Griffin, North Peace Forage Association, Roger Cohen, U of S.

For more information contact Kari Fehr, Ext. Division Rm 117, Kirk Hall, 117 Science Place U of S. S7N 5C8.

January 30, 2002

WATER QUALITY WORKSHOP

Heritage Inn Moose Jaw, Sk

Sponsored by PFRA, the conference will include presentations on Best Management Practices, by Clint Hillard and Livestock and Source Water Protection by Jim Dasley. The afternoon sessions will include presentations on Aeration and Coagulation by Steve Morrell, Ground Water Treatment by Daryl Corkwell and Sask Water's Water Testing Program by Peter Hood. Everyone is welcome.

Contact: Reg Williamson at (306) 691-3399

February 22 - 24, 2002

NATIVE PLANT SOCIETY AGM

Hawood Inn, Waskesiu Lake, Prince Albert National Park This is a call for presenters.

If you are interested please call
(306) 668-3940.

We will have our SWCC display at the following locations:

- Saskatchewan River Basin AGM Oct 11 and 12th, 2001 Calgary, Alberta - Best Western Hospitality Inn.
- The Provincial Association of Resort Communities of Saskatchewan AGM Oct 26 & 27, 2001 Manitou Springs Resort and Mineral Spa, Watrous, SK.
- Yorkton Harvest Showdown, Exhibition Grounds, November 7 to 10th, 2001.
- Saskatoon Fall Fair, Prairieland Park, November 14 to 17th, 2001
- Agribition, Regina, Ag-Ex Pavilion, November 19 to 24th, 2001
- Western Canadian Forage and Grazing Conference, Travelodge Saskatoon, December 5 to 7th, 2001
- PFRA Water Quality Workshop, Heritage Inn, Moose Jaw, SK, January 30th, 2002,

We invite you to stop in and see us at any of the above events.

Stiff Goldenrod



Stiff Goldenrod (*Solidago rigida*) is a perennial plant arising from rhizomes, growing 10-40 cm tall. Bright yellow flowers appear August to October, forming a flat-topped cluster. Leaves are hairy and grow in an alternate pattern up the rough stem. Stiff goldenrod is very common on grasslands and open woodlands.

Barbara Taylor Davis

Share Your Ideas . . .

Please share your story ideas or coming events with:

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The Native Prairie Update is a publication of:



**Saskatchewan
Wetland
Conservation
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Our Gracious Supporters

The Native Prairie Stewardship Program gratefully acknowledges the support of:

Agriculture and Agri-Food Canada through:

- Agriculture Institute of Management in Saskatchewan, Inc. (AIMS)
- Canadian Adaptation and Rural Development Fund in Saskatchewan (CARDS)
- Canada/Saskatchewan Green Plan Agreement

Canada Millenium Partnership Program
Canada Trust Friends of the Environment Foundation

Canadian Wildlife Service and World Wildlife Fund through:

- Endangered Species Recovery Fund
- Ducks Unlimited Canada
- Environment Canada through eco-Action 2000 and the Habitat Stewardship Program

National Fish and Wildlife Foundation (U.S.)

Saskatchewan Environment and Resource Management through:

- Fish and Wildlife Development Fund
- SaskPower Shand Greenhouse
- Saskatchewan Wetland Conservation Corporation
- Wildlife Habitat Canada